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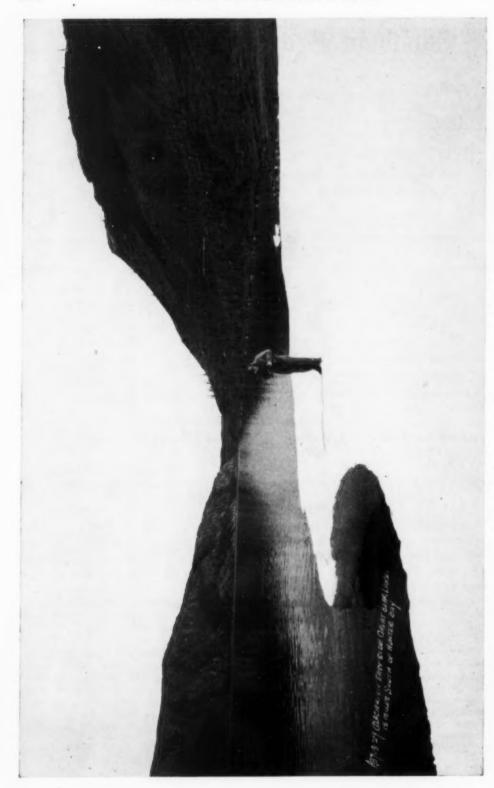
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Typical Great Bear Lake country showing the glacier on the east side of the lake, fifteen miles south of Hunter Bay.



Heading "down north". The Mackenzie River at Fort Norman, as seen through the whirling propeller.

"DOWN NORTH" To Great Bear Lake

Voyaging by Air to Canada's New Northern Mining Centre

E were lounging in the bunkhouse at Cameron Bay on the shores of Great Bear Lake, relaxing after a noble meal of caribou steak served by Bill Johnston, master cook. Big Pete turned on the radio. From two thousand miles south, somewhere in the American depression belt, came a mournful recital of the state of big business or something. It lasted as long as it took one of the boys to reach the radio.

"Choke it!"
he growled.
"Who cares
a bout the
state of big
b u s i n e s s
here."

Nobody cared. They had their own business to attend to the business of building a new empire in Canada's far north, of opening up a new mineral field which bids fair to rank with the world's richest.

When the first Canadian Airways plane broke the great silence as it thundered across Great Bear Lake in 1929, its pilot little dreamed that three years later the thoughts of thousands would be turned to that Sub-Arctic spot; that the fir-clothed hills guarding Echo Bay would yield promise of wealth in silver and gold, and, what is of vastly

greater importance, a new and inexhaustible supply of the ore from which life-giving radium is obtained.

Men who know say that the five or six main mineral discoveries al-

Great Bear Lake ranks among the largest of the world's freshwater seas, its area exceeding 11,800 square miles, greater than Erie, Ontario or Winnipeg, but considerably less than Huron or Superior. It was discovered by men of the North West Company some time before 1800, and a trading post was established there in or about that year. Fort Franklin was built on the south-west shore of the lake by Sir John Franklin in 1825, and he wintered there with Richardson and Back. Fort Confidence was built by Dease and Simpson in 1873 at the eastern end of Dease Bay. The name seems first to have been applied to the river that discharges the waters of Great Bear Lake into the Mackenzie, because of numerous bears found on its banks, and was later given to the lake.



They're just waiting for a plane! Jim Howey, well known mining man at left, and "Wop" May, celebrated northern pilot of Canadian Airways.

ready made on the eastern shores of Great Bear, alone will make a mining camp of major importance. When you realize that approximately 4,000 claims have been staked on favorable ground within a comparatively small area, it is easy to see what a moderate amount of development work will yield.

And to the aeroplane must go most of the credit for the opening up of this newest of Canada's treasure houses. The long arduous water trip from McMurray, down the Athabasca, Slave and MacKenzie Rivers to Fort Norman, then up the Great Bear River with its back-breaking portage, is a thing not

lightly attempted. And the winter trail, over practically the same route, well over a thousand miles long, trudging behind a dog train, proves an effective barrier to all but the hardiest.

Three years ago, those who had business in the Great Bear Lake field were forced to take the ground trail or stay at home. Today you can leave McMurray after an early breakfast and be at Cameron Bay, nearly 800 miles north, in time for a not-too-late supper. Such a speedy trip is common now. Weeks have been cut to hours and Great Bear Lake is now within easy reach of Edmonton.

About the middle of the Eighteenth Century rumours of the fabulous mineral wealth of Canada's Northland filtered to the "outside". Reports of great stores of native copper were brought to the outposts of the Hudson's Bay Company. In 1771 Samuel Hearne after two fruitless attempts, succeeded in reaching the Coppermine River. But nature guarded her treasures well and imposed such physical difficulties that only the most valiant of explorers penetrated the fastnesses of Arctic Canada.

A century and a half later the curtain which veiled the mysteries of the northland was rolled back and nature opened her vast treasures to the hand of man. Claims were staked on Great Bear Lake as far back as 1920 and it is said these were not the first. But the country was then the "Great Beyond".



A dog train on Echo Bay, Great Bear Lake, photographed from a passing aeroplane.



"Local freight" at Great Bear Lake. The writer starting on a tour of mining camps near Cameron Bay.

The story of the first "modern" strike on Great Bear has often been told - how Gilbert LaBine flew into the country in 1929 and staked claims on Hunter Bay; how in the following year, accompanied by a prospector, E. C. St. Paul, he flew into the same locality and was left there by the plane; how LaBine and St. Paul trudged across the wind-swept ice of Great Bear Lake looking for the silver and uranium deposits of which they had been told; how St. Paul was stricken with snow-blindness; how LaBine made him as comfortable as possible, then set out again on his restless search; and how, within an hour later, he chanced upon his "Eldorado".

Then the "outside" heard of the richness of the discovery—pitchblende, from which comes radium, most precious of all elements—native silver which could be blasted from the rock in nuggets. Samples of the former were sent to the Department of Mines in Ottawa.

And so a new empire of the north began. Its foundations were laid three years ago and slowly but steadily it is rising on the Dominion's last frontier. And it is being built by frontiersmen, a type from which the north asks only strength and honesty. The trek has started, and as the sun rises higher in the northern sky the stream of miners, prospectors, traders swells daily.

One air transport company operating in that field moved, with one plane, five tons of freight in five days from Fort Rae at the northern tip of Great Slave Lake, into Great Bear Lake, a distance of approximately 300 miles. There was no fuss about it; there was a job to be done before break-up and it was done. To the earth-bound spectator such achievements seem to border on the impossible, as does the unerring precision with which the pilots skim high above the vast stretches of the Barren and hit their far-off destination right "on the nose".

Those who take the airway into Great Bear Lake are pleasantly surprised at the speed and comfort of the flight from McMurray to Cameron Bay.



Signing for the air mail at Cameron Bay. Pilot H. Hollick-Kenyon, who recently completed 5000 hours of flying, most of it done in Northern Canada.



Unloading supplies from a Canadian Airways plane at Great Bear Lake.

My own trip was typical. From a comfortable bed in the Franklin Hotel in McMurray, I was called at the "crack of dawn". By the time I had finished breakfast, Archie McMullen, Canadian Airways pilot, and Engineer Kennedy, had their big Fokker groomed for the flight "down north". McMullen towed me away in the well-heated cabin, taxied out on the runway, opened her out and soared into the early morning haze. From then on it was like riding in state. Below stretched a vast sweep of territory, like a giant's patch-work quilt of white and brown as far as the eye could see, while across it the Athabasca River took its snaky wav.

Before the view had time to become monotonous, McMullen had throttled down and was circling for a landing at Fort Fitzgerald. Here man and machine took on fuel, our's consisting of a caribou sandwich and hot coffee from a thermos. Then off again, following the winding Slave River out of Lake Athabasea into Great Slave Lake, across this broad sheet of white to Fort Rae. Another pause there for gasoline and

oil, then up and on again to our destination, Cameron Bay, on the east side of Great Bear Lake.

Already the settlement on Cameron Bay is pulsating with life. It is as if the place realizes the important role it will play in the development of Canada's newest north. It has taken on an air of permanency. It has a post office with its own brave stamp, "Great Bear Lake, N. W. T." More than a score of log cabins dot its shores. The Mounted Police have had a station built there and a detachment will move in shortly. A Roman Catholic mission post is expected soon after break-up. federal government is moving its radio station from Hunter Bay; Canadian Airways has had its own radio station on Cameron Bay for some time. There is no isolation—a touch of a key opens the world to you. A townsite is being surveyed and Great Bear Lake will soon emerge as a full-fledged town. It is on a strategic spot, in the centre of the known mining area, and an ideal landing place for planes in summer or winter.



Winter work on a Great Bear Lake silver showing.

This spring, McMurray and Rae, "relay" points on the aerial trail to Great Bear, are among the busiest airports in the country. The roar of motors is never stilled. Tons of machinery are being rushed from the end of steel so that man and his machines may wrestle with nature for the richness locked in the rugged hills. There are not the hardships of the "Trail of 98" nor even of the older Ontario and Quebec stampedes. It is swift, clean, de luxe penetration of a new mining camp. It costs money, but not as much as one would imagine. The Great Bear Lake rush has been called a rich man's game. This is not wholly true. With the increase in traffic, costs have been materially reduced. It is said that a prospector can get into Great Bear, outfitted for a season's work, for an outlay of approximately \$1,000.

The sum is not great enough to deter serious prospecting but it has the virtue of barring from the new north the fly-by-night promoter, the camp hanger-on. It has kept the camp free from an unscrupulous "boom" spirit which has killed many a field and which led Mark Twain to call a mining promoter a "liar with a hole in the ground." The established mining companies and the independent prospectors who are at present in the field, or who soon will be, are in there to make mines.

The people in the area will tell you the country needs no boosting other than that legitimately given it by the results already obtained and by the encouraging prospects evident on every hand. No one who has done any work at all has failed to get good results. It is not necessary here to encroach on the field of the mining and financial journals who have reported in detail upon the various discoveries. These have attracted the attention of the outside world and are making Great Bear Lake a mining camp of major importance.

For many generations the trapper plodded behind his dog-train throughout this northern wilderness, and it is to such men as he that we owe Great Bear Lake and many other treasure spots of the Dominion. He it was who broke the trail and brought to the "outside" the casual word that started



Franklin Avenue, main street of McMurray, Alberta, jumping-off point for Great Bear Lake.



McMurray presents a different appearance in the summer. A pleasant garden in the northern town.



Contact with the outside world. Canadian Airways radio station at Cameron Bay.



A section of the Eldorado camp at LaBine Point.



Mrs. Joseph Gerhardt, wife of a prospector; one of the two women at Great Bear Lake and the first woman to live in the area.

stampedes. And it is men of his type who are laying the foundations of a new civilization in Canada's Arctic. Today, the aeroplane has taken much of the romance from the Northland and its colorful people. In return it has brought them speedy and safe contact with the outside world.

Life is pleasant at Cameron Bay and at the substantial camps which have already been built in connection with two or three of the major mining operations. There are no "talkies", but an evening in a bunkhouse on the shores of Great Bear is an experience in wholesome simplicity which makes the economic chaos a thousand miles to the south something to shudder at. There are two women among the pioneer residents of the district in the persons of Mrs. Joe Gerhardt, wife of

a prospector and Mrs. Harry Reed, wife of a trader. Their photographs in contrasting costumes, accompany this article.

Cameron Bay is in constant touch with the "outside" through the radio station of Canadian Airways, Ltd. Besides its regular function of checking the movement of planes and personnel, of giving weather reports and other information necessary to the efficient operation of aerial transportation, the radio brings daily reports of the major news events throughout the world; it gives a picture of the stock and grain markets and is available for the use of the inhabitants who wish to communicate with the outside. Mail, too, is flown in each week.

An interesting feature in the building up of the town at Cameron Bay is the use made of sled-dogs. They are the "local freight trains", on hauls too short to allow of economical aerial transportation. They carry supplies from the store at Cameron Bay to



Proof of good fishing in Great Bear Lake. Harry Reed, a trader at Cameron Bay. Lake trout weighing as much as 40 pounds are not uncommon up here.

nearby mining operations and do a dozen or so similar jobs. They are playing an important part in the actual construction of the log cabins that are springing up rapidly along the shores of the bay. In the early morning you will see them pad briskly off to the scene of timber felling, bushy tails waving bravely in the breeze. Then two or three hours later, back they come hauling a 700 or 800 pound load of spruce logs. At the end of the day, after several trips during which they have brought in possibly a couple of tons of timber, their tails are not flying at so jaunty an angle as when they started out in the morning, but following a good feed of caribou heads and a good night's rest, they are as fresh as ever for another day's work in the building of a new Arctic city.

And speaking of caribou, the way in which the town is assuring itself of its meat supply for the summer is interesting. A log cabin is built, possibly eight feet square. Water is poured in until a sheet of ice a few inches thick



Checking out a load of air freight. Facing camera, W. B. Airth, engineer in charge of a Great Bear Lake property.



The other lady of Cameron Bay. Mrs. Harry Reed, wife of a trader.

is formed. Then a layer of caribou, cut up into quarters, is laid on top of the ice. This, in turn, is covered with water. When it is frozen, another layer of meat is laid. Again water is poured on, and so on. The meat house in March has nearly three hundred caribou quarters thus frozen for summer's use.

There is no want at Great Bear. All who are there have jobs or are "grub-staked". Unemployment has not spread "North of 65" and it is even feared there may be a shortage of workers there this summer. One mining company a couple of months ago wired in asking for a small crew of men to do some work on its property. They were radioed that there were no men available and that they would have to send their crew in from outside.

Some men were laid off by mining companies at the end of last summer's



Dick Dawson, left, in charge of one of the mining properties at Great Bear Lake. He is holding a sample of ore which runs 85 per cent pure silver.

operations when work was curtailed for the winter. The men would not leave the district. Their summer's wages went for winter equipment, and thus armed they started out prospecting or hunting or trapping on their own. But there will be no lay-offs this season. Six or seven companies, at least, have announced plans for intensive development work this summer, including diamond drilling, and two of them will erect concentrators to treat the rich silver ore.

And those who come to Great Bear will not be disappointed. Inspector Belcher of the Mounted Police, after going over the camp at Cameron Bay, said the conditions there were the best he had seen in any camp in the North West Territories. There is no riff-raff, no idlers. The men are big-hearted,

broad-minded and broad-backed, doing a man's job and glorifying in it.

An occasional band of Dogrib Indians pauses at Cameron Bay on its seemingly aimless wanderings. They are little different in temperament from others of their race and their taste in things the white man brings runs pretty well along the lines of their cousins of the plains.

For instance, one brought some furs into the store. He received probably \$20 for his meagre offering. Then he streaked for a pile of white shirts on a shelf. The shirts were alike as peas in a pod but the Indian examined each one several times before making his choice. Why he wanted a white shirt only he knew. At any rate he handed over \$4 and claimed it. Then \$8 went



At left, Vic Ingraham, pioneer trader at Cameron Bay, Great Bear Lake's "town". Centre figure is Ernie Mills, a nephew of Dr. Charles Camsell, president of the Canadian Geographical Society.



Directly above Cameron Bay at 9600 feet altitude. One of a series of 429 overlapping vertical photographs taken by Canadian Airways for mapping purposes. Aircraft can be seen beached on left side of channel in centre of picture.

for a pair of pants. Ever since he could walk, he had depended on the caribou for his trouser material.

Today, however, he wanted to drape himself in paleface garments. With the remainder of his money he bought some grub and ammunition.

The food he bought was pretty scanty but had he wished could have stocked himself with a varied assortment, and, con-

sidering the fact that it had to be brought well over a thousand miles, the prices at Great Bear Lake are not particularly high. Sugar, for instance, costs 35 cents a pound at Cameron Bay; at Edmonton seven cents. This was before the new duties were imposed. If you must have your breakfast bacon, it will cost you 80 cents a pound for the tinned variety; in Edmonton 24 cents. Flour comes to 25

cents a pound against three cents at Edmonton. Gasoline is high. At \$2.75 a gallon at Cameron Bay you use it sparingly. To bring this merchandize into Great Bear by the water route costs 18 cents a pound freight and the trip takes approximately four weeks, so chain-store prices are hardly possible. With the ever-increasing traffic into the area, however, and the ever-widening use of the aeroplane, these prices will undoubtedly be reduced.

The extent to which the airways are used even at this early stage of the field's development is seen in a comcarried of tonnage McMurray to Mackenzie River points and into Great Bear Lake. In 1931, the planes of Canadian Airways, Ltd. alone carried 138,626 pounds of express into the Mackenzie River area, which includes the Great Bear Lake field. In 1932 they carried 408,561 pounds, more than 200 tons. In addition, 54,828



ALLEN BILL

Mr. Bill was born at Windsor, N.S., served as an officer in the Royal Air Force during the Great War and also in Northern Russia in 1918 and 1919.

For two years after the War he was with Federal Governne was with rederal Govern-ment survey parties on the prairies. Later joined the staff of the Winnipeg Tribune with which paper he is associated as financial editor.

pounds of mail were flown north along the Mackenzie Aklavik and 10.437 pounds into the Peace River

country, making a total of 473,826 pounds for the year. an increase of 335,200 pounds over 1931.

Figures are not vet available on the amount of freight carried since the first of this year but when they are given they probably will tell the story of the greatest feat of aerial transportation

in the history of this country. For several weeks before the break-up, the airways of the north were never at rest. From dawn to dusk the planes were ever on the go. Pilots who made their homes at McMurray were little better than strangers to their families.

Speed is the watchword of aerial transportation in the north-speed with safety. Thousands of pounds of supplies must be moved in to

give life to the mining operations. The Arctic winter is jealous of its daylight and when there are only a few brief hours in which to operate. no time can be wasted. The aeroplane has been a valuable aid to the miner in other ways than transporting him and his equipment to remote fields. Aerial mapping is an instance. In "pre-air" days, maps of unsettled parts of the country were far from accurate. Today, however, there are few parts of Canada that have not been photographed from the air and subsequently maps made from the photographs; maps that are accurate down to the last detail. One map which is of inestimable value today is that prepared by Canadian Airways including an area of 150 square miles in the Great Bear Lake district. This map represents a new departure in mining activity, and is the first commercial attempt in the Dominion of Canada



Photo by courtesy Mr. Geo. M. Douglas.

Pilot E. Stull, freighting at old Fort Franklin, Great Bear Lake. There are two serious obstacles to water transport between McMurray and Great Bear Lake. The greater one is the series of rapids north of Fort Smith, where everything must be portaged. The second one is the swift flowing Great Bear River, outlet from Great Bear Lake.

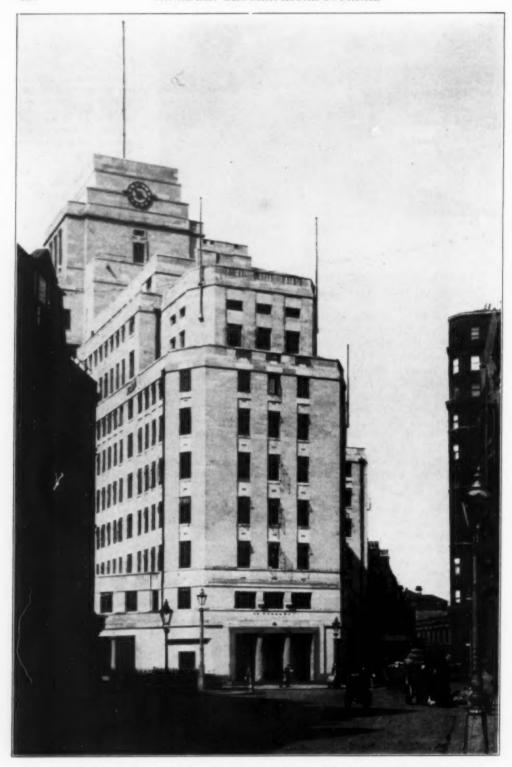
to provide aerial vertical photographs for geologists, mining engineers and prospectors.

The map is a mosaic, prepared by matching together 429 vertical photographs of the area, one of which is shown with this article. The photographs were taken from a height of 9,600 feet, and the resultant prints, assembled and rephotographed, compose a true vertical picture of every part of the area. The map shows all physical features, and brings out faults and other structures in a remarkable manner.

In innumerable ways the aeroplane has proved its worth in the development of countries both old and new. In all corners of the world seeds of progress have been sown from some high-flying chariot of the air. But in few, if any, have such strides been made as in the case of our newest mineral field at Great Bear. Never have such vast distances been erased from the map of Canada, such richness uncovered for the use of man by his mechanical hand-maiden. And when the wheels of industry turn and the smoke of factories rises over Great Bear Lake, Canada's airmen will be remembered among the foremost pioneers of empire.

Ore in sacks at Eldorado Mine ready to be transported by air. Left to right—P.O. Supt. Hale, H. G. Beresford, Charles LaBine, John Michaels, E. C. St. Paul. Gilbert LaBine, brother of Charles LaBine, was the discoverer of this field, and the brothers are the largest operators at Great Bear.





Underground House, the new headquarters of London's splendid Underground Railway system.



Bush House and St. Mary-le-Strand.

London's New Architecture

By A. W. SWAN

RAPID change is not confined to the cities of the New World. No city has changed more quickly in the past 10 years than London; in the few short years since the war there has come a new idea in design, the beginning of a style which may owe something to the American skyscraper, and something to what one may call the "cubical" school of France, Holland, Germany and Sweden; but which is definitely national and definitely English.

It is curious to trace the progress of this interesting development. During the years preceding the war, building in London and in England generally was based so firmly on the great styles of tradition, that with a few outstanding exceptions, such as the beautiful Anglican cathedral at Liverpool, there were few public or office buildings constructed between 1900 and 1918 that one would call really fine and worthy to stand

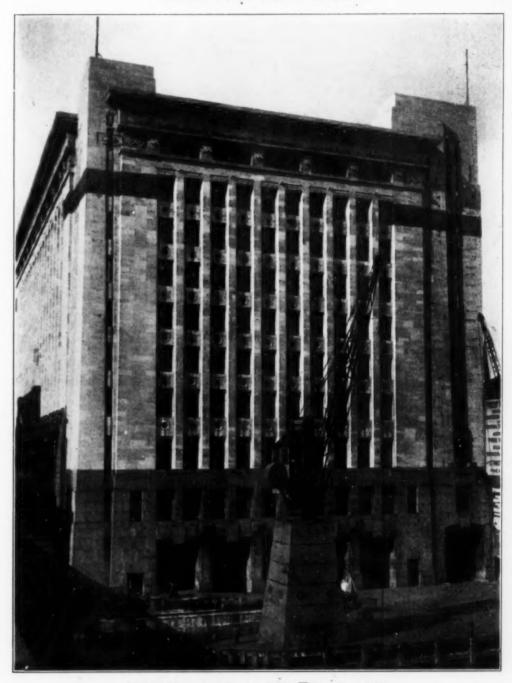
comparison with the thoughts in stone of earlier architects. After the war, there began to be stirrings. Regent Street is entirely Crown land, and like all Crown land is let on "leasehold"; that is, the land is rented for building purposes only for a definite period, and buildings must conform to regulations laid down by the Crown authorities. It so happened that the 99-year leases of the buildings in Regent Street fell in about the end of the war, and as a condition of all the renewals was rebuilding, the whole of Regent Street from Waterloo Place North to beyond Oxford Circus, together with most of Piccadilly Circus, fell rather suddenly due for reconstruction. The Crown authorities did not prescribe any particular designs, but they did stipulate on a classical basis; they insisted that any single block-in the American sensebe of a single design even if divided



The new Daily Express Building.

insisted on a uniform design for the "Quadrant", that part which curves eastward to Piccadilly Circus. Another important consideration affecting the

among several leaseholders, and they architects was the stringent regulations affecting not only Crown land buildings, but all built in the County of London, that, except when special permission is given, the height must not exceed 80



Adelaide House from London Bridge. F Egyptian solidity.

feet to the cornice, and that there must not be more than two stories above, set back at a prescribed angle.

The Crown's particular regulations had one odd result; one which must puzzle many visitors to London can be seen in the new "Liberty's". Liberty and Company wished to re-build in the Elizabethan manner, half-timbered with tall chimneys; the style one sees in so many of England's fine old mansions. The Crown authorities said that this

would not be in keeping with the classical remainder of Regent Street; so there was the curious result of a narrow building on Regent Street in the approved classical manner, and a fine half-timbered building adjoining it, but facing on a side street. The building is genuine "half-timbered" it really does employ the method in which the timbers form part of the structure, and it is not a case of the alleged half-timbered front which one sees on the "Bellevue" of the suburbs.

As to Regent Street itself, one can only regret that the re-building did not fall due 10 years later than it did when English architects were recovering confidence and a style. Piccadilly Circus is perhaps more successful; or at least the north, west, and south sides, which are Crownland, and which have therefore been re-built to a definite scheme. They contrast strangely with the jumble that is the north-east corner. One result of the re-building of Piccadilly Circus, by the way, is the hiding of that undistinguished building, the Regent Palace Hotel.

One of the first of the fine post-war buildings, and still one of the best, is Bush House, constructed for Irving Bush of New York.

Kingsway, that thoroughfare boldly cut through slums from Holborn to the Strand in the time of Edward the Peacemaker, finishes at its southern end by a double approach, known as Aldwych, curving east and west to the Strand. This encloses a semicircle of land that



Grosvenor House Hotel from Hyde Park.



Portico of Adelaide House.

for many years remained almost a wilderness, with two buildings only, the Gaiety Theatre at its western extremity. and Australia House at its eastern extremity. Mr. Bush had the bold and fine conception of a great building that would take up the remainder, and Bush House is almost the realization of that dream. Unfortunately the site was so large that it was impracticable to proceed with the whole conception at once, and after the erection of the first block, the original Bush House, part of the land was sold to other owners and built upon to different designs. However, about a year or so ago, the original plan was proceeded with and now most of the area is enclosed, and Bush House, while not conforming precisely to the original idea, is approaching completion. The problem has been a difficult one, as there are two frontages, one on Kingsway and one on the Strand; and the effect must necessarily be different in each case. To Kingsway, Bush House stands as the monumental end; a fine effect. In the Strand, the architect, an American by the way, had the problem of designing a lone high building which should be

big yet not dwarf the exquisite church of St. Mary le Strand. He succeeded. as will be seen in the photograph on page 227.

Adelaide House is one of the most interesting of the buildings following on Bush House, this time designed by an English architect. Here was a fine site, hard by London Bridge, and facing the Thames. The architect, affected possibly by German ideas, designed a building that is simple to severity, a great block that yet is saved from being dull by its fine proportions and by the ingeniously subtle use of the "batter", or inward slope of the exterior walls, an Egyptian effect. (See illustrations on page 229 and above).

The new extension to Olympia, the Exhibition Hall, was apparently designed with a somewhat similar idea in mind, and undoubtedly the German influence was at work. But whereas Adelaide House is grim but impressive, the new Olympia is merely grim.

The next manifestation of the modern spirit came in what Londoners call "The City", the square mile bounded by Aldgate, Moorgate, Aldersgate and



Bush House, Kingsway Frontage. Effect of height and importance.

Temple Bar, that small but important territory over which the Lord Mayor holds sway. The modern significance of the "City" is that it is the financial centre not only of London, but of Great Britain. Within that square mile are crowded banks, insurance houses, brokers, dealers, a vast wealth and importance. Naturally enough, it was the banks which initiated the re-building, and what

more fitting than the "old lady of Threadneedle Street", the Bank of England, should lead the movement. When the "Bank" was designed many years ago the main consideration was that the building must be impregnable, and it therefore presented a blank exterior to the world. The result was the Bank as most of us know it, a mysterious low building hiding behind



South Frontage of Underground Building, showing Epstein's "Day."

massive walls free from windows, and broken only occasionally by tremendous doors. With the passing of the years the need for expansion grew more and more urgent, and the problem was of course how to secure the greater room without sacrificing Sir John Soames' really impressive exterior. The problem was taken seriously, and it was at length decided to remodel the interior entirely, raising lofty buildings, and so to design the whole that it should accord with the original exterior. One might have thought this impossible, but the impossible sometimes happens, and the new bank slowly taking shape above the old is not only beautiful of itself but it is a marvellous example of how one architect



The New Daily Telegraph Building-and St. Paul's.

without copying in the least can understand the spirit that moved his predecessor.

The new bank is free Classic, the Grecian orders being used as means to

an end, with the several unit buildings balancing and complementing one another in an impressive whole. An interesting feature of the new bank, and one that is being employed effectively



North Frontage of Underground Building showing Epstein's "Night."

on many of London's new buildings, is the use by the architect of sculptured figures as part of the actual design, an idea which, while dating back to classical times, has only recently taken new birth. The monumental figures on the facade can be seen plainly in the illustration on page 236.

The "free Classic" has other fine examples in London; the new Westminster & Midland Banks, hard by the "Old Lady", the new "Daily



The New Bank of England.

Telegraph" building in Fleet Street, and notably the tremendous office buildings erected beside the Thames on the Chelsea side of the Houses of Parliament. Here are two adjoining buildings, Thames House and the building of Imperial



Whitehall Theatre. Modern simplicity.

Chemical Industries, which show how two architects can work together to produce an harmonious effect while retaining full individuality. Sculptured figures are an important part of the design of Imperial Chemical Industries House; but they are "realistic", and less part of the design than those of the Bank, with slightly ludicrous results in some instances. The late Lord Melchett was no doubt a remarkable man, but whether his effigy adds to

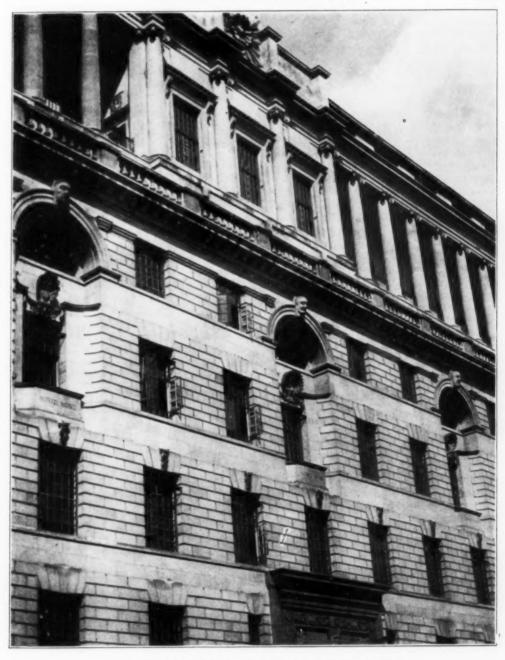


Broadcasting House.

the decorative value of this particular facade, is at least open to doubt.

Among the many influences that have affected the present day English architect one of the most powerful is the Continental. The uninformed scoff at the bareness of the Continental manner, but while it may have its excesses, this style has a fine idea behind it, the idea that a building should

express its purpose, and not merely be an architectural shell in some fancy style or other. One can understand that architects with this basic idea in mind run to a certain severity, and secure their effects rather by balancing mass against mass, than by paying strict attention to, say, a Florentine façade or a Mansard roof. These continental architects, le Corbrisier and the rest



Part of Frontage of Imperial Chemical Industries Building.

have discovered, too, the astonishing beauty produced by shock, as for instance in the unexpected change of direction in outline.

Several buildings recently erected in London show these principles admirably, not only offices but theatres. Consider the re-built Adelphi Theatre for instance. Here is an awkward problem for the architect, a theatre front which is merely one unit in a long solid frontage; how is he to make it stand out an individual? It is solved by the unexpected angle, by the bold use of masses of colour. It is Continental, possibly, — effective, certainly. The

Whitehall Theatre shows another and quite different way of solving a similar difficulty; here is a white façade simple to essentials, beautiful in proportion, and depending not at all on factitious ornament. (Illustration on page 237).

But the theatre after all is usually only a front as far as the public is concerned. How do our moderns go about a complete building which can be seen on all sides? London provides the answer in the Underground headquarters, and the new Broadcasting House. The Underground building designed by Mr. Charles Holden, speaks for itself. Here is a building which is definitely an office, designed to provide the maximum of light, to be useful; yet the architect has not forgotten proportion and massing. The Underground building flood-lit at night is one of the sights of London. It is significant that Mr. Holden, architect of Underground House, has been chosen recently for the \$15,000,000 extension to London University.

Broadcasting House is a triumph for the "functional" school. It has been designed expressly to house the head-quarters of the British Broadcasting Corporation, with studios, offices and machinery. The architect, Mr. Val Myer had to design a building containing a central "tower" for studios, surrounded by, yet insulated from, a protecting shell of offices, and this is what Broadcasting House is. The studios vary in size from a hall seating 1000 people to cosy rooms for lectures; and convenience and working efficiency have been studied to the last degree.

The building has the architectural beauty of balance of parts, with admirable proportioning, and it owes much to the curved frontage of the site on which it has been built. But its real beauty lies in its sense of fitness; one has the same feeling as that which prompts an engineer to say of a machine; "That's a lovely job; look at its clean

lines."

Externally, the building is simple, plain, yet bold. With its curving lines sweeping to the south it has been compared with the bow of a greet ship standing up over Regent Street.

The new architecture reached Fleet Street very gently in Bouverie House, the home of Benn Bros. the publishers; a building which is pleasantly noteworthy to-day for the terrace garden of dwarf trees which provides an oasis of green in the grey, red, and soot of the Street of Ink. The new Daily Telegraph building is a much more forceful affair, with a bold balancing of mass against mass and a strong columnar facade. (Page 234).

As was to be expected, when the "Daily Express" required a new building, it was distinctly a case of startling the populace, and the new home is modern of the moderns, functional to the last degree. The style is German, and the building is a huge block of glass and aluminium as can be seen from the photograph, on page 238, in which the reflection of the more prosaic buildings on the south side of Fleet Street gives a curious effect. While the outline of the building is striking, and the architect has achieved a fine effect with his receding masses, there may be two opinions on the interior. The main office is fronted by an immense expanse of plate glass from ground to ceiling level, making the clerks visible to the casual passer-by, and providing a reasonable basis for the name which the writer actually heard applied by a Cockney onlooker, "Beaverbrook's Bird Cage." Lord Beaverbrook, with whom the "Daily Express" is so closely identified, has at least been faithful to the land of his birth, since the architect, presumably under instructions from his august employer, has provided a frieze of silvered maple leaves on the walls of the public office.

The architecture of modern London is very much alive.





Department of Trade and Commerce photograph

A typical prairie town sky-line, showing seven country elevators (five with double-capacity annexes). In the foreground a combine is harvesting wheat which will later be hauled to one of the town elevators.

Castles of the New World

By WALTER B. HERBERT

TS roots deep-hidden in time and its authorship lost in the obscurity of historic days, there has come up through the years what is styled a French proverb: "War to the castles; peace to

the cottages!" The exclamation mark is an important

part of the saying.

This was no platitude, such as many proverbs are. Rather a cry; a shrill, meaningful warning which expressed the suppressed credo and pent feelings of a people living unhappily in a deformed social structure. War to the castles! Throughout the French Revolution this cry was second only to "Liberté! Egalité! Fraternité!" The reason is not far hidden. Castles spelled war, oppression, cruelty, and disruption of the country-side. In Germany, too, the baronial castles came to be regarded as the fountain-heads of oppression and the storm centres of civil war. It is true that at times the peasantry

flocked to the castles of their overlords for protection. But the mere fact that such castles were dotted throughout the countryside rendered possible the existence of bands of marauders who might

swoop down to despoil and pillage what lay before them. In Italy, in Austria, in England, throughout all the Old World. these massive piles of masonry, fortified and menacing, stood for the bellicose

features of the seignorial system. And so, despite the occasional touches of romance tossed in by novelists. and some splashes of chivalry which the poets have added, the notion of castles of the Old World has come to us with nasty and fore-

boding shadows.

The New World, too, has its castles. Canada has her castles: thousands of them scattered strategically from Halifax to Victoria. these castles of the New World share none of the bad repute of their European They stand for forbears. none of the oppression associated with the olden castles of the Rhine. They have no part in disturbing the peace or disrupting the commerce of the nation. Rather, they

are the antithesis of those gloomy piles which emerged with evil names from mediaeval times. They are fortresses of peace, storehouses of plenty, essential links in a chain of peaceful trade and



WALTER B. HERBERT

Winnipeg, was until recently Assistant Director of Publicity for the Canadian Wheat Pool. At the University of Alberta, where he secured his B.A. and LL.B. degrees, he edited the tudent newspaper, and has student newspaper, and has been in and out of newspaper and magazine work ever since



"Waiting at the end of the Road"... a line-up of farmers waiting to unload their wheat. In the busy season these streams of vehicles are on the road day and night, often requiring the country elevator agent to be on duty for 20 hours a day.

commerce. The castles of the New World are the grain elevators which dot the prairie skyline of western Canada and tower along the waterfronts of the Dominion's growing ports.

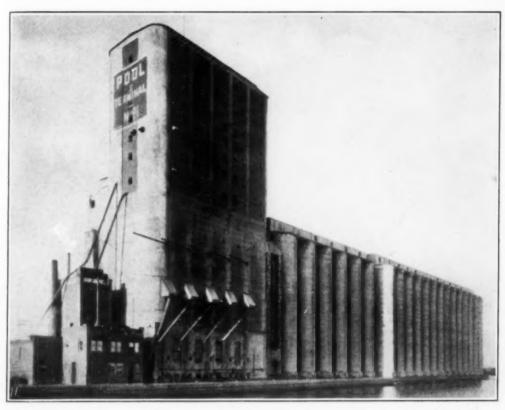
Each year the fertile loam of Alberta.

Saskatchewan and Manitoba produces in the neighbourhood of half a billion bushels of the world's finest grain. Canada's small population consumes only a mere fraction of this huge production and the balance is shipped across the seven seas to fill the bread baskets of Europe and Asia. From 200,000 prairie farms, where the grain is coaxed from the soil, wheat flows in a never-ceasing stream to the ocean ports. From January to December, in fair weather and foul, Canada's wheat is on the move.

But production and distribution do not

keep in step like good soldiers. About the

middle of August the wheat fields begin to assume the golden hue which betokens maturity and ripeness and from that time until Christmas the harvesting machinery, first reaping, then threshing, sings a pleasant song of industry throughout the west. In those few weeks the fruit of the soil is garnered and threshed and made ready for the processes of distribution which engage the attention of men and machinery for the balance of the year. Thus, the castles of the New World come into the picture. They are the storehouses of the Canadian cereal crop pending its gradual movement into the channels of international trade. They can be divided roughly into two classifications: country elevators and terminals. Of the former there are 5,651 scattered across the prairies, while about 150 of the terminal type loom



One of the smaller ones at Port Arthur. This elevator has a mere capacity of 1,300,000 bushels!

large against the skyline of important distributing and milling centres from Victoria to Halifax.

Every traveller crossing the Canadian prairies is impressed by the repeated sight of country elevators standing stark and rather unbeautiful at every town and siding along the railway line. As palm trees in the distance foretell the approach to an oasis, the western Canadian grain elevator is always the shadowcast-before of a village around the bend. Some towns boast two, three, half a dozen, even more, of these chaste and simple granaries; others, mere stoppingoff places, present only a single castle rearing its solitary head to the sky. More than 2,000 points on the western railway lines are provided with elevator facilities.

Architecturally, the country elevator is nothing to inspire delight, unless one has a decided flair for the sharp and uncompromising lines of l'Art Moderne. The typical "house," to use the jargon

of the grain people, measures about 35 by 35 feet and stretches itself 80 feet skyward. An English visitor once said that he watched expectantly for a 40foot soldier to emerge from each elevator, so much did these buildings appear to him as giant sentry-boxes before an imaginary Buckingham Palace. featureless exterior of lumber or galvanized metal sheets, as the case may be, is unbroken by windows except for a single peep-hole in the cupola, close to the roof. Construction of one of these houses consists mainly of the simple process of spiking layer upon layer of 2" x 6" lumber to form the outside walls, or cribbing, and 2" x 4" lumber to form the inner bin walls.

The inside of a country elevator is comparatively simple, although highly interesting upon first view. At the summit is the cupola, a sort of work-room which contains spouting devices for distributing the grain into the different bins below. The whole of the structure is



Taking on cargo. The huge lake freighter has just pulled up to the terminal elevator and the grain is pouring through the spouts into her hold. When loading is completed the boat's deck will be almost level with the wharf.

divided into deep rectangular bins, like so many assorted spaghetti boxes upended. The work floor, slightly above the surrounding ground-level, contains the scale and dump and a lot of ancillary things which no one but an elevator-man

would understand. The newer types of elevator dumps are operated electrically or by air-pressure, although there are still many houses where the dumping process depends upon the strong-arm methods and a crank. The dump lifts the front wheels of the farmer's wagon or motor truck; thereby enabling the load of grain to slide out through the back door. The grain rushes into the pit, which is a huge steel tank, much like a giant's bath-tub. placed in the ground below. Reaching from the pit to the cupola, is "the leg," a box-like casing which encloses an endless belt studded with steel cups. When the belt is set in motion the cups pick up the grain in the pit and carry it to the top of the house, where it spills into a hopper and is carried, by the force of gravity, through a spout to its proper bin. This process, by which the grain is moved from the ground to the bins, accounts for the name "elevator" which is applied to these modern granaries.

Each elevator is built adjacent to a railway track so that boxcars may be spotted beneath a shipping spout for quick and convenient loading. The average new-type

country elevator contains 20 to 25 bins, varying in size from 1,000 to 3,000 bushels capacity. The variety of bins is required for segregating the many kinds and grades of grain, and to provide private storage space for farmers who



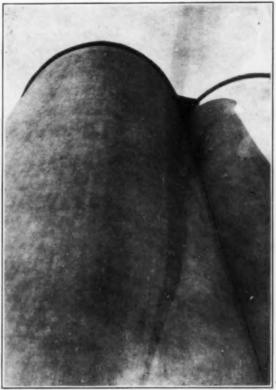
View of the harbour at Fort William. The freighters, with steam up, are awaiting their turns to approach the elevators and take on cargoes of grain for lower lake ports.

wish to maintain the identity of their own grain when it is shipped out. The newest standard houses have a storage capacity of from 30,000 to 40,000 bushels. They are capable of receiving and elevating 1,400 bushels of grain an hour, and in shipping can put 3,000 bushels per hour into the box cars.

Being constructed entirely of dry lumber, these buildings are highly inflammable and the fire menace is a constant one. Every year the mortality rate is heavy, due to fires caused by overheated bearings, sparks from nearby fires, carelessness with matches, and other reasons. Fire insurance premiums naturally form a large item of overhead expense in connection with operation.

Such are the castles of the New World planted at every railway siding across Canada's prairies. They are the one distinctive architectural feature of the western scene. A bit drab and ugly in appearance, but actually the sentinels of Canada's agricultural prosperity; teeming with golden grain in the busy season, and always standing ready to serve the farming community and the whole nation.

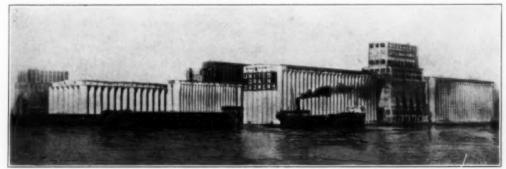
The other type of castle, spectacular, impressive, is more comparable, in bulk at least, with those staid, massive piles of the old lands. Leviathan masses of reinforced concrete, equipped with a maze of intricate modern machinery and powered to high speed and efficiency, they stand in our ports and beckon to the ships. On Canada's Pacific coast, at



A terminal elevator's concrete storage tanks tower 200 feet above the railway tracks. This beetle's-eye view conveys the proper impression of massiveness.

Prince Rupert, Victoria, Vancouver and New Westminster, points of origin of cargoes destined for the Orient and for Europe by way of the Panama Canal, a group of terminals can take care of 18,000,000 bushels.

At Canada's "bay ports" and "lower lake ports," on Georgian Bay and Lakes Erie and Ontario, a string of castles of



Brigdens Limited photograph.

The ramparts of Port Arthur. View showing terminals operated by United Grain Growers, Union Terminal Company, Saskatchewan Wheat Pool and James Richardson Company.



Canadian National Railways photograph

One of the many terminal elevators at the port of Montreal. Moving belts convey the grain from the elevator to ocean vessels through the long galleries shown upper right.

the New World dots the shore line, ready to receive an additional 42,750,000 bushels. At Prescott, Montreal, Sorel and Quebec, along the shores of the broad St. Lawrence River, one sees the sturdy lines of these grain strongholds erected by Canadian enterprise to handle another 27,500,000 bushels. The white bulks that gleam in the maritime ports of Halifax and St. John, on the Atlantic coast, can tuck away 4,500,000 bushels. Yes; and far away on the shore of Hudson Bay, a castle rears its loftly head to the sky. The Federal Government recently completed an operating unit of a 2,225,000 bushel plant at Churchill, terminus of the Hudson Bay Railway; the very newest castle in the very newest land.

At Calgary, Edmonton, Moose Jaw and Saskatoon, great interior transfer terminals have been erected by the Dominion Government, and at many important milling and distributing centres huge private manufacturing elevators are a part of the picture.

It is at the twin ports of Fort William-Port Arthur, however, that the world's greatest assemblage of grain storage space is to be found.

One must be thoroughly blase and disillusioned to be able to sail into the harbours of Port Arthur and Fort William without being deeply impressed by the sight of the massive concrete edifices which line the waterfront of the twin cities, like a group of gargantuan pipe-organs. Lapped gently by the water of Lake Superior and the Kaministikwia River, or violently buffeted, according to the mood of the lake, these great granaries offer storage space for about 90,000,000 bushels of grain. The quantity of wheat which can be stored in their cylindrical bins would be enough to keep the entire population of the British Isles supplied with bread for nearly five months.

Thus, from ocean to ocean and from Hudson Bay to the United States border, there exist 5,787 castles of the New World with a total storage capacity of 402,750,000 bushels. If all the available bins were filled with wheat at one time the mass of grain would weigh more than twenty-three billion pounds. It would

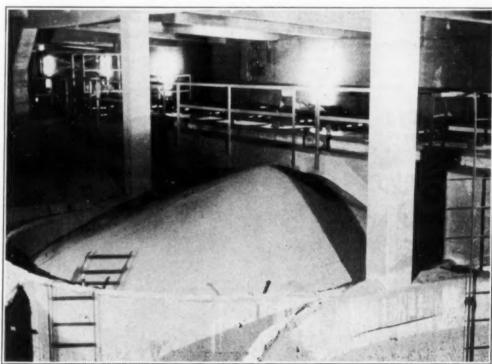
supply the population of the British Isles for a year and a half or fill Canada's bread-basket for eight years.

The typical terminal elevator consists of a central rectangular workhouse with wings, or annexes, of cylindrical bins. There is a "receiving side" and a "shipping side," the former equipped to receive grain from railway cars and the latter ready to pour grain into ships which berth alongside. Bay port and lower lake terminals are used to transfer grain from large lake freighters to smaller craft which are able to navigate the present canal system to the Atlantic. These terminals are equipped with huge sucker legs which may be inserted in the holds of steamers to extract the grain and elevate it for transfer.

Pool Terminal Number Seven is 1,334 feet, or nearly half a mile, long; 218 feet in height; 226 feet wide; and has a capacity of 6,900,000 bushels. A description of some of the equipment inside this giant plant reads: "The equipment of the workhouse includes

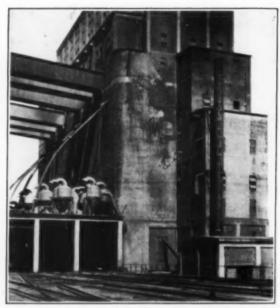
5 receiving legs, 6 shipping legs, 14 cleaner legs, 2 screening legs and 1 drier leg." One might base a riddle on this centipede: It has 28 legs but cannot walk. This same elevator has 683 bins, carying in capacity from 32,000 to 4,000 bushels. More than seven miles of belting serve these bins!

The building, erected upon a foundation of thousands of spruce pilings which reach to bed-rock, touches the harbour waters where steamers may tie up alongside. On the opposite side of the structure, a series of railway tracks extends from the main railway yard to the extreme end of the elevator property. Midway along this private trackage is the "track shed," where cars are dumped. Box-cars, loaded with grain from the west, are lined up each day by the railway company at one end of the tracks. The cars are then pulled by power-cable into the track shed, emptied, and rolled away to the opposite end, where they stand ready to be hauled away again to the west for reloading. These car yards



Saskatchewan Wheat Pool photograph

Cylindrical bins filled with golden wheat. In the left foreground is an interstice bin. These in-between spaces are also used for storage purposes.



Saskatchewan Wheat Pool photograph.

A close-up of a track-shed and work-house. The odd-looking devices on the roof of the track-shed are "cyclone" dust collectors. The galleries, upper left, connect the work-house with the storage annexes.

of the terminals vary in size, according to the capacity of the elevator itself. In connection with Pool terminal No. 7, for instance, there are 10 tracks, each able to accommodate 23 cars on the offshore end. Thus, the railway company may place, at one operation, 230 cars for unloading.

The track shed is the first place where "things happen." If the elevator is equipped with automatic car-dumps things happen in a big way. The automatic dumper handles a loaded car with as much ease and despatch as a lady would handle a box of chocolates. The car is securely clamped to bumpers at each end, a button is pressed in the control tower, and a 50-ton load of car and grain is tipped on end. The grain in the upper end of the car rushes through the open car door into the pit below. The car is then tilted on its opposite end and the balance of the grain dumped. These giant devices are able to unload a bulk of

75,000 pounds of wheat every five minutes, and readily handle seven carloads an hour. In terminals not equipped with the automatic dumpers the unloading is done with remarkable celerity by means of great scoops dragged by electrically powered cables.

From the dumper the grain tumbles through a coarse grating into a huge pit built beneath the track floor. Each pit is arranged to receive grain from the two tracks above it, so that in an elevator served by 10 tracks it is possible to unload 10 cars simultaneously. From the pit the grain pours through a hopper to a conveyer belt which carried it to an elevating leg. Thence it goes, with dizzying speed. to the weighing floor at the summit of the work-house. Here, in hopperscales which hold 75 tons, government officials weigh the incoming The grain may then be grain. dropped to the floors below, where batteries of cleaners and dryers will condition it prior to storage. Or it may flow to the distributing floor

where it is directed to conveyer



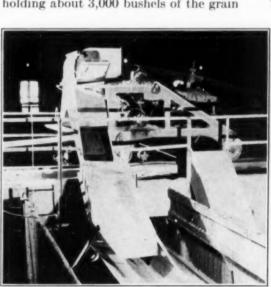
Saskatchewan Wheat Pool photograph.

The belt has received grain from a spout at the base of a bin and is carrying it to an elevator leg. The leg will lift the grain to the top of the work-house so that it may be dropped into a ship berthed beside the terminal.

belts and carried to any one of the hundreds of bins in the annexes.

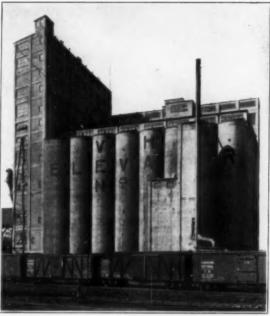
When, as a visitor, you first enter a terminal elevator, your initial impression is one of much confusion, noise and dust; a maze of complicated machinery; a labyrinth of weird spouting and an amazing assortment of swiftlymoving belts. But after one of the elevator men has taken you in hand and guided you patiently through the plant, your original impression of disorder and mystery is replaced by an appreciation of orderliness and systematic control. First your guide invites you to squeeze into a small steel cage with him. He presses a button, and you enjoy a leisurely ascent to the top of the workhouse. When the lift stops you are about 200 feet up and your first act is to dash to a window for a view of the waterfront below. You are on the top floor where the grain, reaching the head of an elevating leg, is tossed into a hopper as the belt buckets make the turn.

Then your guide leads you down a narrow stairway to the garner floor immediately below. Here you discover mammoth bins or garners, each capable of holding about 3,000 bushels of the grain



Saskatchewan Wheat Pool photograph.

A tripper, which transfers grain from one conveyor belt to another.



Leonard Frank photograph.

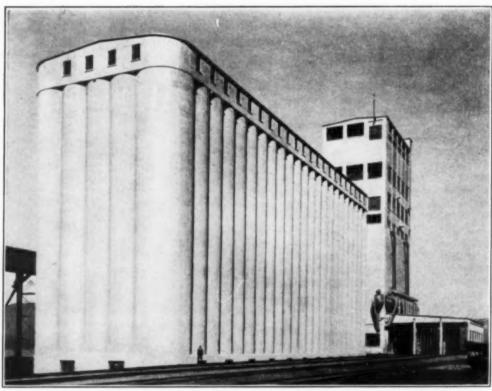
One of the sights of Vancouver. Storage room for the wheat from 50,000 acres of prairie land.

which has been tossed from the leg head above. These garners hold the grain until the scale bins, on the floor below, are ready to receive it.

You clamber down more stairs to in-

vestigate the scale floor. Official government weighmasters are the crowned heads here. The giant bin scales hold from 2.000 to 2.500 bushels, and weigh 75 ton loads with such accuracy than an eightpound weight will break the beam. These scales are electrically operated and print the exact weight on a card when the balance bar rests at centre. Human hands have no control over the grain until the scale has printed its story. Then the bulk is automatically released and the scales empty themselves in less than three minutes.

On the floor below, called the distributing floor, your guide tells you about the huge S-shaped spouts which arouse your curiosity. Each spout is attached to a ceiling swivel immediately beneath a scale bin exit, while the free end is equipped with rollers which facilitate the



Wrathall photograph

A 1,250,000 bushel plant erected at Prince Rupert, B.C., by the Federal Government. Capacity may be doubled by the erection of another annex at the far side of the work-house.

moving of the spout mouth to the desired position, over one of a large number of holes in the floor. Which hole the spout will be tucked into depends upon the destination of the grain to be distributed. Some holes are the entrances to drop-spouts which carry the grain to cleaners or driers below. Others lead to the shipping floor. Still others are the mouths of greedy belts which lurk hungrily below to snatch grain for their concrete maws in the storage annex.

You and your elevator man next proceed down to the cupola floor where you are delighted to find long series of moving belts carrying grain far down dimly lighted corridors to the storage annexes. As you walk along beside one of these belts you cannot resist the temptation of placing your hand in the stream of wheat. You are startled by the force with which the grain is carried forward. Then you peer into the great concrete cylinders, some empty and seemingly

bottomless, others overflowing with golden grain. You examine a tripper; a device which deflects the grain from a belt into a bin or to another belt travelling to some other part of the building. The tripper is equipped with wheels so that it may be moved to any desired position along the belt.

You return to the workhouse and ride in the little cage again to the shipping floor several flights below. Here you find equipment similar to that on the scale floor, but adjusted to weigh out the grain and send it on its journey to the ships which wait below. Then you look around the cleaner floor. The cleaners are noisy and dusty machines and seem to create a distinct vibration in the massive building. They are an extremely important part of the plant's equipment, however, and do their work with marvellous efficiency.

Before the grain reaches these machines, it has already been freed,



Saskatchewan Wheat Pool photograph.

Deck view of a grain carrier loading at a terminal elevator. The many hatches enable numerous loadingspouts or unloading-suckers to be utilized simultaneously.

during dumping, elevating, and so on, of horse-shoes, felt hats, stones, tobacco pouches, and the remarkable variety of other foreign objects which frequently travel with it from the harvest fields. It still contains, however, matter which must be removed before the miller will be satisfied. Other kinds of grain, bits of straw, fine sand, tiny weed seeds, and wild oat hulls are the sort of things which the terminal cleaners must remove before the grain can receive a clean bill of health.

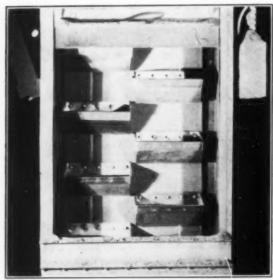
The cleaner is an intricate piece of machinery, but its simple principle involves passing the grain over a series of violently-shaking screens or revolving perforated discs until the pure grain is completely separated from foreign substances.

The drying machinery room, which you examine next, offers a noticeable contrast to the cleaner floor. In this part of the terminal there is no dust, no assault upon the ear-drums, no vibration

or swift action. Grain to be dried is run slowly through a hot-air chamber (about 180 degrees F.) until all surplus moisture is evaporated. From the driers, as from the cleaners, the grain is directed to an elevating leg and thence distributed to storage bins or is shipped out.

Before you leave, the elevator man will draw your attention to interesting little devices called automatic samplers. These are installed on the shipping floor, and elsewhere, to secure a fair average sample of the bulk of grain passing into or out of the elevator. The device consists of a number of tiny buckets fixed to a revolving chain, adjusted to scoop portions of grain from a moving stream and to deposit them in a receptacle. It provides the government inspectors with a sample accurately representing the character of the bulk of grain under consideration.

The shipping side of the building is equipped to load grain into the holds of grain ships docked in the adjacent basin.



Saskatchewan Wheat Pool photograph.

A peek at what is inside an elevating leg, showing how steel cups are studded on the belt.

Some terminals run the grain through spouts directly from the plant to the ship. Others, particularly those built on the seaboard, are so situated that the ships cannot berth immediately alongside. In

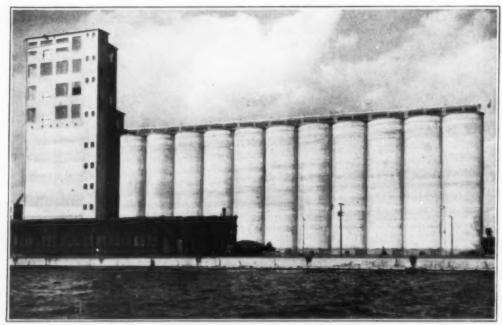
such plants the grain is conveyed by belts, through long trestle galleries, to the ships.

The functions of a terminal elevator are threefold: first, to receive grain for storage until it is shipped; secondly, to transfer grain from railway traffic into steamship service, where it can be hauled great distances at relatively cheap rates; thirdly, to dry and clean and other-

wise condition grain.

It is possible that another chapter is yet to be written in the story of western Canada's grain elevator development. This depends upon whether or not the Hudson Bay Route becomes the thriving artery of international commerce visualized by its advocates. In 1931 a trial shipment of half a million bushels of Saskatchewan wheat was shipped from Churchill to Liverpool. The masters of the two British ships which carried the

grain reported a voyage of no unusual difficulties or hazards, and declared the new northern route to be perfectly safe and sound. Last year, 10 ships called at the Federal Government elevator



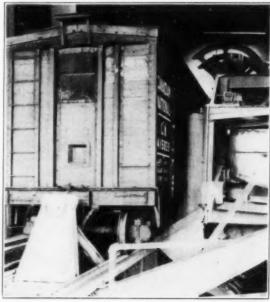
Harold Fleming photograph.

A far western outpost. One million bushel terminal at Victoria, B.C.

at Churchill for over 2,000,000 bushels of wheat shipped to Europe by the Saskatchewan and Manitoba Wheat Pools. Enthusiastic supporters of the Bay Route see the day, in the near future, when many millions of bushels will be shipped to Europe annually via this northern route.

A terminal elevator designed to handle 2,000,000 bushels constitutes the total grain handling equipment at Churchill at present. New facilities will be needed when the Bay Route grows in popularity as a grain shipping avenue. Additional grain storage space may be installed at Churchill; but this is unlikely unless railway facilities to the port are greatly augmented. What is more probable is the construction of interior storage space at points in northern Saskatchewan and north-western Manitoba. All of Saskatchewan north of the Regina plain, together with the Swan River Valley country in

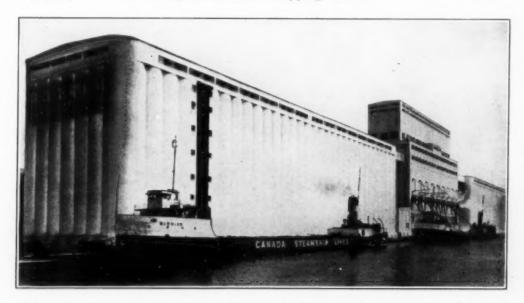
Manitoba, can be regarded as tributary to the Hudson Bay Railway. In this great grain-producing area, at centres like Humboldt, Rosthern, Prince Albert, Melfort and Swan River, it may be necessary to erect storage terminals.



Saskatchewan Wheat Pool photograph

Car clamped in place on automatic dumper ready to be tilted. Note the pit lower right.

These plants would provide storage service for grain from a thousand country points, and would be in a position to forward grain expeditiously to Churchill during the Bay Route's shipping season.



Pool Seven, Port Arthur-Fort William. The largest and fastest single-unit elevator in the world. The men standing between the two boats give some idea of the size of the elevators.



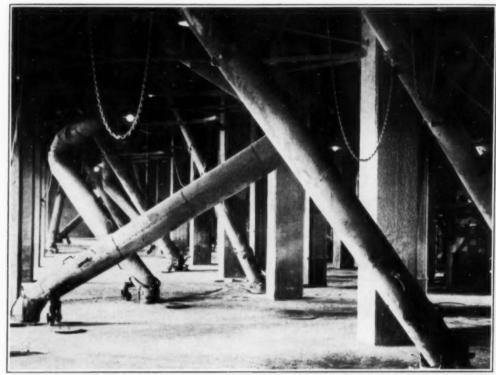
Saskatchewan Wheat Pool photograph.

Showing how cars are unloaded at terminals not equipped with automatic dumpers. The shovel-boards are dragged from the back of the car by power cables, thereby pushing the grain before them and into the pit. The men in the car simply guide the scoops.

If this development materializes it will involve a more extensive use of the "hospital-storage" type of terminal. These are designed for all-rail receiving and shipping, and are equipped with elaborate machinery for cleaning, drying and otherwise conditioning grain. The federal government interior storage terminals situated at Calgary, Edmonton, Moose Jaw and Saskatoon are most important as emergency stations during the busy autumn weeks when the movement of grain creates a heavy demand for railway transportation. It is readily seen that if all grain had to be hauled from country points directly to terminals at the head of the lakes or at Vancouver much time would be lost. Country

elevators would become jammed while waiting for empty railway cars to carry away the flood of new grain. The interior storage terminals serve to prevent such situations. During the busy season trainloads of grain may be rushed from country points to the nearest interior terminal. The grain is poured into concrete bins for temporary storage, and the empty cars are hustled back to country shipping points for further service.

Elevators of this type, located at strategic points in Saskatchewan and Manitoba, could receive the grain in the autumn, thoroughly clean and treat it during the winter months, and forward it to Churchill in June or July ready to be poured into the ships. Thus the facilities



Saskatchewan Wheat Pool photograph.

The distributing floor of a terminal elevator. The spouts lead from the hopper-scales above to the various bins and conveyor-belts below.

at the Bay port would be able to devote their full capacity to receiving grain from the railway and transferring it to the ships without delay. Grain handling facilities at Churchill are limited, and transportation facilities offered by the Hudson Bay Railway are limited. Hence, in the event of the Hudson Bay Route becoming a popular grain marketing channel, interior terminals will have to be provided on an extensive scale in the territory tributary to the new route. It is possible that ten years from now numerous points in northern Saskatchewan and northwestern Manitoba will be provided with stand-by terminals which will serve as feeders for the shipping plants at Churchill.

Although all these castles of the New World constitute a characteristic and highly-important feature of the Cana-

dian scene, they are but one part of the great grain distributing system which Canada has worked out on an elaborate and efficient scale. The broader scene includes the hauling by waggons and motor trucks from the farm to the country station, the railway systems, the inspection service, the chains of grain ships steaming down the lakes, and the harbour supervision at ports where great ocean liners nose in to fill their stomachs with the golden grain. But all of that is another story. Suffice it to say, in conclusion, that the castles of the New World constitute one of Canada's offerings to the goddess of progress, and that they are, in contrast to the castles of the Old World, towers of peace and plenty, sentries of international good-will and friendship, outposts of prosperous trade and commerce.

Editor's Note Book

One has a feeling that, when Government Bulletins begin to get lyrical, the world is going a little mad. Listen to this: "The northward migration of bird life in southern Canada grows like a swelling tide through April and does not reach its height until the middle of May. Typical of these later arrivals are the swallows circling overhead in pursuit of their insect prey; the orioles whose gay colours and martial notes bring them to the attention of all; and the bobolinks which fly like madcaps in ecstasy over the greening meadows drenching them with their wonderful songs." The man who wrote this no doubt works at a desk, but his heart is in the open. "Birds such as these" he continues, on a more prosaic note, "arriving in Canada when the weather has become more settled, generally return on a rather exact schedule arriving about the same time each year. It is interesting to note that the time of their return has a more direct relation to the state of development of vegetation and of insect life in the region than to the man-made calendar, and mankind will never cease to wonder at the instinct that brings the bobolink back north from far-away Brazil at just the right time to avoid April snows and starvation on the one hand and to help prevent an undue increase in the numbers of awakening insect pests in the grasslands on the other."

An appeal, signed by the Archbishop of Canterbury, the Earl of Selborne, Rt. Hon. L. S. Amery, and a number of other prominent Englishmen, has been made for subscriptions to a fund to commemorate by a worthy memorial the achievements of the late Sir Charles Lucas. He was not only for many years an Assistant Under-Secretary of State in the Colonial office, but did important work for the Empire as Chairman of the Royal Empire Society during the critical years of the war, and for the cause of social service as

Principal of the Working Men's College. He was a pioneer of research into the history of the British Dominions and Colonies, among his works, recognized as standard authorities, being A History of Canada, 1763-1812, The Canadian War of 1812, The British Empire, The Beginnings of English Overseas Enterprise, The Story of the Empire, The Empire at War, the Partition and Colonization of Africa, and An Historical Geography of the British Colonies. Several of these, notably the last-named, are of special interest to the members of the Canadian Geographical Society. These who wish to subscribe to the fund should send their cheques to Ralph S. Bond, Hon. Treasurer. Charles Lucas Memorial Fund, C/o The Royal Empire Society, Northumberland Avenue, London, W. C. 2, England. The memorial will probably take the form of a portrait, bust or plaque, to be placed in the Colonial Office.

The tercentenary of the birth of Samuel Pepys is being celebrated this year, and one finds oneself considering the most famous of all diarists from the point of view of geography. Pepys certainly was not what one could call a great traveller. Most of his life was spent in his beloved London, with short excursions to Oxford, Bath, and other neighbouring towns. His one journey abroad, during the period covered by his Diary, was to The Hague in 1660, with the Commissioners who were bringing King Charles to the throne. Pepys gives a lively account of the Dutch city and its inhabitants. At the con-clusion of the Diary, in 1669, he is preparing to go abroad for his health. From the point of view of description, however, the Diary comes very much into the field of geography. Where else, indeed, will one find a more complete account of London in the latter days of the Commonwealth and the early period of Charles II.

THE SMOKE OF THE BRITISH EMPIRE

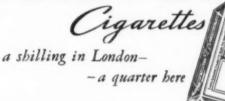


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The recent suggestion of a New York politician - though probably not intended to be taken very seriously that in the event of the United States agreeing to build the St. Lawrence deep waterway Canada should cede all that part of the Dominion lying south of the St. Lawrence, reminds one of other similar though less fantastic suggestions that have been brought forward from time to time, designed to round out the boundaries of either the United States or Canada, as the case might be, by transferring what might be called unsymmetrical bits of territory. One of these bright ideas was that Vancouver Island should be swopped for the socalled Panhandle of Alaska. Another much more modest notion was that the oddly isolated bit of Minnesota on the west side of the Lake of the Woods might be conveyed to the Dominion for a consideration.

Transfers, or even exchanges, of territory are, however, seldom brought about, largely because financial or other practical considerations are complicated with less reasonable but more compelling arguments of national pride and local prejudice. One such transfer is nevertheless a matter of history. Many years ago the United States built a fort at considerable expense near the northern end of Lake Champlain, on what was then supposed to be United States territory. When the boundary surveys were completed, however, that country found to its dismay that the expensive fortifications were on the Canadian side of the international boundary. Negotiations were entered into, and it was finally agreed that at this point the boundary should bend slightly to the north, and in exchange a similar area should be transferred to Canada some miles to the westward.

Among a number of recent articles in the Canadian field in other geographical periodicals, these may be particularly mentioned: "The Skookumchuck Basin of the Purcell Range" by Gilbert Wilson (Geographical Journal, Feb. 1933) "Retreat of the Ice in the Canadian Cordillera" by A. O. Wheeler (Alpine Journal, Nov. 1932), "The Historical

Geography of the Columbia-Kootenay Valley" by J. Monroe Thorington (Bulletin of the Geographical Society of Philadelphia, Jan. 1933), "Notes on Seiches and Currents in Great Bear Lake" by A. E. Porsild (Geographical Review July 1932).

How rumour grows is illustrated in a note in a recent number of the Geographical Review and another in the January 16 number of the Scottish Geographical Magazine both relating to the Trail Smelter Investigation, in southern British Columbia. Both magazines are primarily interested in the geographical fact that the Trail Smelter is situated in the deep valley of the Columbia a few miles north of the international boundary and that the prevailing winds being north-easterly sulphur fumes from the smelter are carried across the boundary into the United States, but both make very positive statements as to the grave extent of the injury to vegetation, notwitshtanding the fact that this happens to be a highly controversial question as to which Canadian and American specialists of repute are not altogether in agreement.

And that reminds one that it is just about a century and a quarter since David Thompson, the Canadian explorer, stood first of white men on or about the spot where the Trail Smelter stands to-day. He had crossed the Rocky Mountains in 1807, by what was afterwards known as Howse Pass, and in the years that followed explored practically every foot of the Columbia, and its great tributary the Kootenay, from source to mouth. It was largely on the score of his discoveries that England once maintained that the boundary between Canada and the United States — or rather between British North America and the United States, in the far west, should follow the Columbia from the 49th parallel to the sea. It should, perhaps, be explained that, while Thompson discovered the upper waters of the Columbia, and explored the entire river to its mouth, Lewis and Clark preceded him on the lower part of the river in 1805, and Captain Robert Gray had sailed into its mouth in 1792.

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Peter Kalm, the Swedish naturalist, who visited the city of Quebec in 1749, gives an entertaining account of the town as it was in his day, and an even more entertaining account of its inhabitants. "The civility of the inhabitants" he says in his Travels "is more refined than that of the Dutch and English in the settlements belonging to Great Britain; but the latter, on the other hand, do not idle their time away in dressing as the French do here. The ladies especially dress and powder their hair every day, and put their locks in paper every night, which idle custom was introduced in the English settlements. The gentlemen generally their own hair, but some have wigs. People of rank are used to wear laced clothes and all the Crown officers wear swords. All the gentlemen, even those of rank, the Governor-General excepted, when they go into town on a day that looks like rain, carry their cloaks on their left arm. Acquaintances of either sex who have not seen each other for some time, on meeting again, salute with mutual kisses.

Peter Kalm gets on rather dangerous ground when he proceeds to compare the ladies of Quebec and Montreal. "Those of the latter place seemed to be generally handsomer than those of the former. Their behaviour likewise seemed to be somewhat too free in Quebec, and of a more becoming modesty in Montreal. The ladies of Quebec, especially the unmarried ones, are not very industrious. A girl of eighteen is reckoned very poorly off if she cannot enumerate at least twenty lovers. These young ladies, especially those of a higher rank, get up at seven, and dress till nine, drinking their coffee at the same time. When they are dressed, they place themselves near a window that opens into the street, take some needlework, and sew a stitch now and then; but turn their eyes into

the street most of the time. When a young fellow comes in, whether they are acquainted with him or not, they immediately lay aside their work, sit down by him, and begin to chat, laugh, joke and invent double-entendres; and this is reckoned very witty. In this manner they frequently pass the whole day, leaving their mothers to do all the business in the house. In Montreal the girls are not quite so volatile, but more industrious."

Here is another glimpse of old Montreal and its environs, from the Diary of Mrs. John Graves Simcoe. On June 13, 1792, she writes: "We went on shore intending to go by land the remaining three leagues to Montreal. We found Captain Stevenson just arrived in Mr. Frobisher's phaeton, sent for me as a hired caleche is a wretched conveyance on the excessive rough roads around Montreal. Notwithstanding the merits of the phaeton, I every moment expected to have been thrown out by the violent jerks in passing over the ruts in this bad road."

Four days later Mrs. Simcoe continued her Diary: "The joy I felt in finding myself in spacious apartments was checked the next day by finding the heat more insufferable than I had ever felt. The thermometer continued at 96 for two days, and the heat was not ill-described by a sentinel who exclaimed, 'There is but a sheet of brown paper between this place and hell'.

And on the 18th.: "Captain Stevenson carried us two miles beyond the fine prospect towards La Chine, which is three leagues above Montreal, I think merely to show how bad the road was, and we returned about nine o'clock to Mr. Frobisher's villa on the side of the mountain and drank tea there. I dined at Mr. Frobisher's house in the town, where the chairs were the same as I have seen sold in London for four guineas each."

Finally, on the 19th: "I dined with La Baronne de Longueuil at a pretty house she and Mr. Grant have built on the north shore of her island of St. Helen's."

Mrs. Simcoe was the vivacious wife of the then Lieutenant Governor of Upper Canada. This same year he presided at Newark (now Niagara-onthe-Lake) over the first session of the legislature of the province. The Frobisher whose guest she was in Montreal was Joseph, a partner of the North West Company and one of the nabobs of the fur trade. His home, Beaver Hall, stood on the ridge of Beaver Hall Hill, near the present position of Belmont Street. The 'spacious apartments' which Mrs. Simcoe occupied on the 17th were in the Chateau de Ramezay, at that time and up to 1849 the official residence of the Governor. The Baronne de Longueuil was the daughter of the third Baron de Longueuil and inherited the title. She married Captain David Alexander Grant, and their son became the fourth Baron. The present holder of this interesting title — the only one that has survived in Canada from the French period - is Reginald D'Iberville Charles Grant, Baron de Longueuil

Mrs. Simcoe saw one side of the hospitality of the Nor-Westers in Montreal. Colonel Landmann, in his "Adventures and Recollections", describes a man's dinner party at the home of Sir Alexander Mackenzie, the explorer and fur-trader: "In those days we dined at four o'clock, and after taking a satisfactory quantity of wine, perhaps a bottle each, the married men, Sir John Johnson, McTavish, Frobisher, O'Brien, Judge Ogden, Tom Walker, and some others retired, leaving about a dozen to drink their health. We now began in right earnest and true highland style, and by four o'clock in the morning the whole of us had arrived at such a degree of perfection that we could all give the war-whoop as well as Mackenzie and McGillivray, we could all sing admirably, we could all drink like fishes, and we all thought we could dance on the table without disturbing

a single decanter, glass or plate by which it was profusely covered; but on making the experiment we discovered that it was a complete delusion, and ultimately we broke all the plates, glasses, bottles, etc., and the table also, and worse than that the heads and hands of the party received many severe contusions, cuts and scratches . . . I was afterwards informed that 120 bottles of wine had been consumed at our convivial meeting. but I should think that a great deal had been spilt and wasted." Other days, other ways!, as Mr. Georges Bouchard would say. It is well to remember, when well-meaning people lament the lack of sobriety in these days, that we have travelled a long, long way from the manners of Colonel Landman's time; nor should it be forgotten that the men at this hilarious party were outstanding citizens of Montreal.

Gaspé, the peninsula that stretches out like a wide finger into the waters of the Gulf of St. Lawrence, is perhaps the oldest settled part of North America. Legend tells us that long before Columbus braved the fury of the Atlantic to discover the New World, hardy Breton fishermen and adventurers from Scandinavia visited these shores annually, to return each fall, heavily laden with cod and other fish with which the waters of the Gulf abound. This fascinating part of Eastern Quebec is now well served by paved highways, one of them the Perron Highway, skirting the shore of the river from Quebec to Gaspé and back again by the south shore as far as Matapedia

Those who travel west on transcontinental trains, as they follow the course of the Ottawa river, do not perhaps always realize that this was for many generations the recognized thoroughfare from Montreal to the great west, for explorers, fur-traders and travellers. A few miles east of Pembroke, for instance, on the Quebec side of the river, stands the village of Fort Coulonge, at the mouth of the Coulonge river. At least as long ago as 1680 a stockaded fort was built on this spot,

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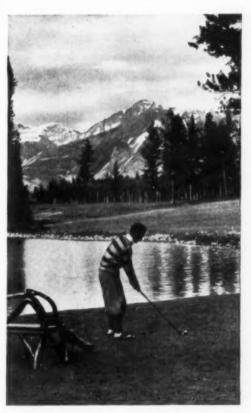
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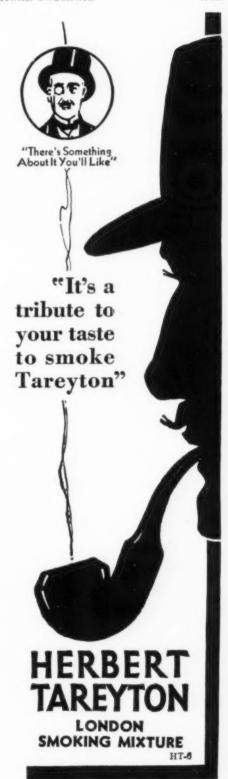
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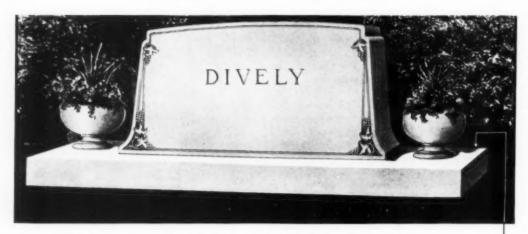
and for three-quarters of a century the family of d'Ailleboust, Sieurs de Coulonge, traded with the Indians. When Alexander Henry, one of the first of the British traders to pass this way after the Conquest, paddled up the river in 1761, he found the fort deserted. Harmon, another early fur-trader, mentions it in 1800. About that time the post was re-established by the North West Company, who operated it until the union with the Hudson's Bay Company in 1821. It was carried on by the latter Company until about 1865, making a period of almost continuous occupation of one hundred and eighty five years.

From Murray Bay and from Quebec, roads lead north into the fastnesses of the Quebec forest, a 36-mile drive. carrying the motorist to the fringe of Laurentide park, one of the most extensive game sanctuaries and natural playgrounds in the world. This magnificent park, which remains today much as nature made it, embraces over 4,000 square miles of forest and lake and stream, and in it the Government of the Province of Quebec has set up bungalow camps on waterways which a few years ago were known only to the Indian, the trapper and the wandering fur trader. Arrangements have been made whereby these camps may be reserved by parties for specified dates during the summer months, so that anyone desiring to spend a holiday in the park may be assured of adequate accomodation when he gets there.

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Amongst the New Books

Indians of Canada. By Diamond Jenness. Ottawa: King's Printer. 1932.

Mr Jenness' book, admirable in plan and execution, will be of very great value to every one who has occasion to study the subject with which it deals. It covers every aspect of a very wide subject - origin, tribal organization, languages, economic conditions, food resources, hunting and fishing, dress and adornment, dwellings, travel and transportation, social and political organization, social life, religion, folk-lore and traditions, oratory and drama, music and art, archaeological remains, and relations with the whites. And, having been prepared by one who is thoroughly competent to speak with authority, both its facts and conclusions may be accepted as accurate - that is to say, as accurate as any human facts or opinions may be expected to be. The work is illustrated with a large number of photographs, some from life others reproducing pictures by Paul Kane and other artists.

The Land of Timur. Recollections of Russian Turkestan. By A. Polovtsoff. London: Methuen & Company. 1932. 10/6.

Samarcand — Bokhara — Mazanderan - the very names conjure up fascinating pictures of Central Asia, the land of Tamerlane and Genghis Khan, scene of the adventures of Alexander of Macedon and Marco Polo. The author spent years there before the war as diplomatic adviser to the Russian Governor General of Turkestan. and writes not only with authority but with unusual sympathy and charm. He has the enthusiasm of one who knows and admires the people of this ancient land and its beautiful and impressive monuments of long ago, its wide plains and gigantic mountain ranges. "It rises so far up that it looks unreal: you

feel that you ought to shake yourself and wake up, for it is all bound to be a dream. Not just a few little peaks huddled together, but from right to left, for miles and miles and miles, a gigantic saw of dazzling diamonds and crystals going up and up and on and on, with no supplementary half-ranges or ridges in front, against a background of deep blue sky."

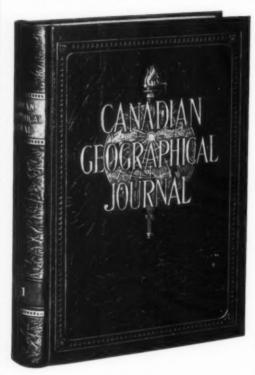
A Wayfarer in Denmark. By Georg Brochner. London: Methuen and Company. 1932. 7/6.

An excellent guide to Denmark and the Danes, the land that sent Canute to conquer Britain and Hans Christian Andersen to capture the imagination of the world. Naturally much of the book is devoted to Copenhagen, its ancient castles and churches, its monuments and bridges and gardens, but we learn also a good deal about other old Danish towns and the countryside with their many associations. Many readers will find the last chapter, devoted, to Andersen, the most fascinating part of the book, his early and later years in Copenhagen and his friendship and associations with such famous contemporaries as Dickens, Hugo, Lamartine, Jenny Lind, Mendelsohn, Heine, the Schumanns and Meyerbeer.

Across Lapland. By Olive Murray Chapman. London: John Lane. 1932. 15/.

A readable account of a very unusual journey through Lapland,—Norwegian, Swedish and Finnish,— in midwinter, with sledge and reindeer. Mrs. Chapman had been warned that it could not be done, but she proved that it could. There was inevitably a certain amount of discomfort, plenty of excitement, but no particular danger. As so often happens, the Lapps who were not

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brought into direct touch with the outer world and its ways proved to be almost invariably friendly and helpful. Many things in the narrative suggest conditions in northern Canada, the Lapp pulka corresponding to the Eskimo sled, though it is drawn by reindeer instead of dogs. The Lapp of course is much more advanced than the Eskimo in the ways of civilization, but otherwise resembles him rather closely. Mrs. Chapman's photographs and sketches in colour make particularly attractive illustrations.

Foot-loose in India. By Gordon Sinclair. Toronto: S. B. Gundy. 1932. \$2.

In vivid, pungent, frank and slangv English Mr. Sinclair tells the story of his travel and adventures in India, from the Khyber Pass to Madras, with a supplementary jaunt through parts of Burma. It is easy to dismiss this book as the superficial impressions of a journalistic globe-trotter, but it is a good deal more than that. It leaves with one the phantasmagoric quality of that teeming world we know as India; the incredible difference between life as it is lived in India and, let us say, in Canada; the utter absurdity of applying the standards of conduct, moral, social or political, of Europe or North America to India. Mr. Sinclair describes scenes and conditions in Benares — the city that is holy to hundreds of millions of Hindoos - that leave a filthy taste in one's mouth. And for contrast, the Taj Mahal!

China. By J. O. P. Bland. Toronto: Doubleday, Doran & Gundy. 1932. \$2.50.

It required a certain amount of courage to attempt to disillusion a world permeated with Chinese propaganda. Mr. Bland, who has spent many years in China, and has written a number of books on the people and policies of that extraordinary country, deals here with the things of to-day. It is a thought-compelling book and one that repays careful reading. The author's criticism of world opinion amounts to this, that its judgment has been so clouded by sentimental sym-



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pathy that it has completely lost track of the realities. It has been hypnotized by the extraordinarily skillful publicity work of the Kuomintang and its agents at Geneva and in the capital cities of the great nations, and has accepted at their face value the confident assurances of the Nanking Government in the matter of political, social, legal and economic reforms, when any kind of unprejudiced investigation would have proved conclusively that for the most part these reforms were nothing more than programmes, with no tangible existence except on paper. Mr. Bland's considered view is that, despite the assurances to the contrary of young Chinese students educated in American universities, the basic principles and conditions of modern democracy are as hopelessly repugnant to the Chinese mind as they are to the mind of India.

Early Days in Montreal. By Lilian M. Hendrie. Illustrated by Harold Beament. Montreal. Privately Printed. 1932.

The purpose of this little book is to "give readers some idea of the wealth of historic interest that attaches to Montreal itself and to the places more immediately surrounding it." It deals with places and buildings and people, from early French days through the beginnings of the period of British rule, to comparatively modern times. We learn something about old churches and monasteries, and the personality and homes of famous Montrealers, statesmen and soldiers and merchants, explorers and fur-traders.

Sketch of the Activities of the Canadian Handicraft Guild and of the Dawn of the Handicraft Movement in the Dominion. By M. A. Peck. Montreal. 1929.

Although this booklet was issued several years ago, it contains so much information about a very important and significant movement in Canada that one can have no hesitation in mentioning it here. Mrs. Peck traces the history of the Guild, and outlines

the extraordinarily interesting work it has done since 1900 in developing and encouraging home industries and handicrafts, and finding a market for their products. Since 1902 there have been considerably over two hundred exhibitions held in various parts of Canada as well as in London, Boston, Chicago, St. Louis, Bermuda and other places. The Guild has also repeatedly sent exhibitions on tour, both to the Pacific Coast and throughout the Maritimes. Since the publication of the booklet a School of Handicrafts has been established in Montreal which is giving instruction in weaving, and will extend its work to other handicrafts. The Guild is also giving instruction in the Mackay Institute for Deaf and Dumb Children.

On foot in Yorkshire. By Donald Boyd. On Foot in the Peak. By Patrick Monkhouse. London: Alexander Macklehose & Co. 1932. ea. 5/.

Concise, readable and well-illustrated handbooks, useful alike to those who have already tramped through these delightful parts of England and to those who have not yet had that privilege. One is told where to go, how to get there, what one will find of interest by the way, where one may stay with reasonable comfort, and even something about rock climbing in the Peak district, and the delectable food of Yorkshire.

Sea Escapes and Adventures. By "Taffrail." Toronto: Longmans, Green & Company. \$1.

Another book for boys, by the writer who has entertained many older readers with his detective and war novels. Captain Dorling proves once more, in these true tales of escape and adventure, that truth is stranger than fiction. The stories range in time from that of the survivors of the "Peggy" in 1765 to Shackleton and the "Endurance" in 1914-16, and the record is brought practically up to the present time by a final chapter on the air conquest of the Atlantic.